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Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of the claims in the application.

Claims Listing

1. (Currently Amended) A method for detecting, isolating or purifying a bacteria comprising:
placing a sample in contact with a device, wherein at least a portion of the device comprises a plurality of zones, wherein at least one zone is a detection zone separable from said plurality of zones and the remainder of the device; wherein the detection zone comprises an immobilized binding partner for ~~an analyte~~ a bacteria and wherein binding between the immobilized binding partner and a suspected ~~analyte~~ bacteria causes formation of an optically detectable signal and detection of the signal indicates the presence of a suspected ~~analyte~~ bacteria in the sample;
separating at least part of the detection zone containing the bound ~~analyte~~ bacteria and immobilized binding partner from said plurality of zones and the remainder of the device; and
analyzing the separated detection zone containing the bound ~~analyte~~ bacteria and immobilized binding partner without detaching the bound ~~analyte~~ bacteria from the immobilized binding partner to provide information regarding the suspected ~~analyte~~; and
~~wherein the analyte is a bacteria.~~
2. (Previously Presented) The method of Claim 1, wherein the device is a lateral flow device.
3. (Currently Amended) The method of Claim 1, wherein the information identifies the suspected ~~analyte~~ bacteria.
4. (Currently Amended) The method of Claim 1, wherein the information describes one or more characteristics of the suspected ~~analyte~~ bacteria.

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5. (Currently Amended) The method of Claim 1, further comprising:
placing the separated detection zone containing the bound analyte bacteria and immobilized binding partner in conditions effective to cause the quantity of the suspected analyte bacteria to increase.

6. (Currently Amended) The method of Claim 1, wherein analyzing the separated detection zone containing the bound analyte bacteria and immobilized binding partner comprises placing the separated detection zone containing the bound analyte bacteria and immobilized binding partner on or in a selective growth medium in which the analyte bacteria will proliferate if present.

7. (Currently Amended) The method of Claim 1, wherein the method further comprises storing the device without further processing for up to five days after placing the sample in contact with the device and before separating the detection zone containing the bound analyte bacteria and immobilized binding partner from the plurality of zones and the remainder of the device.

8. (Cancelled).

8. (Currently Amended) A kit for performing the method of Claim 1, comprising a device; wherein at least a portion of the device comprises a plurality of zones, wherein at least one zone is a detection zone; wherein the detection zone comprises an immobilized binding partner for ~~an~~ analyte a bacteria, wherein the detection zone is separable from the plurality of zones and the remainder of the device and, wherein the separated detection zone is analyzed to provide information regarding the bound analyte; ~~and wherein the analyte is a bacteria.~~

17 10. (Currently Amended) A device for detecting bacteria, wherein at least a portion of the device comprises a plurality of zones, wherein at least one zone is a detection zone separable from said plurality of zones and the remainder of the device; wherein the detection zone comprises an immobilized binding partner for ~~an~~ analyte a bacteria and wherein binding between the immobilized binding partner and a suspected analyte bacteria causes formation of an optically detectable signal in the detection zone, and wherein the

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device comprises structural features that facilitate separation of the detection zone containing the bound ~~analyte~~ bacteria and the immobilized binding partner or a part of the detection zone containing the bound ~~analyte~~ bacteria and the immobilized binding partner from the plurality of zones and the remainder of the device, wherein said separated detection zone or part thereof can be analyzed to provide information regarding the bound ~~analyte~~; ~~and wherein the analyte is a bacteria.~~

⁹
~~11~~. (Currently Amended) The method of Claim 1, wherein the ~~analyte~~ bacteria further comprises a food or environmental contaminant.

12. (Cancelled).

¹⁰
~~13~~. (Currently Amended) The method of claim 1, wherein the ~~analyte~~ bacteria is a pathogen.

²¹
~~14~~. (Previously Presented) The method of Claim ²⁰~~26~~, wherein the device is a lateral flow device.

²²
~~15~~. (Currently Amended) The method of Claim ²⁰~~26~~, wherein the information identifies the suspected ~~analyte~~ bacteria.

²³
~~16~~. (Currently Amended) The method of Claim ²⁰~~26~~ wherein the information describes one or more characteristics of the suspected ~~analyte~~ bacteria.

17-19 (Cancelled).

¹⁸
~~20~~. (Previously Presented) The device of Claim ¹⁷~~16~~, wherein the device is a lateral flow device.

¹⁹
~~21~~. (Currently Amended) The method of Claim 1, wherein analyzing the separated detection zone containing the bound ~~analyte~~ bacteria and immobilized binding partner to

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provide information regarding the suspected analyte bacteria comprises analyzing the separated detection zone containing the bound analyte bacteria and immobilized binding partner using a strip test binding assay, an agglutination assay, a DNA polymerase chain reaction test, a motility test, a toxicology test, and serotyping.

¹²
22. (Currently Amended) The method of Claim 1, wherein analyzing the separated detection zone containing the bound analyte bacteria and immobilized binding partner to provide information regarding the suspected analyte bacteria comprises analyzing the separated detection zone containing the bound analyte bacteria and immobilized binding partner using a DNA polymerase chain reaction test.

¹³
23. (Currently Amended) The method of Claim 1, wherein analyzing the separated detection zone containing the bound analyte bacteria and immobilized binding partner to provide information regarding the suspected analyte bacteria comprises analyzing the separated detection zone containing the bound analyte bacteria and immobilized binding partner using selective media or selective agar plating.

¹⁴
24. (Currently Amended) The method of Claim 1, wherein the analyte bacteria is Escherichia coli, Salmonella or Listeria.

¹⁵
25. (Currently Amended) The method of Claim ¹⁵24, wherein the analyte bacteria is Escherichia coli O157.

²⁰
26. (Currently Amended) A method for detecting, isolating or concentrating a bacteria by placing a sample containing the bacteria under conditions effective to cause proliferation, replication or reproduction of the bacteria comprising:

placing a sample in contact with a device, wherein at least a portion of the device comprises a plurality of zones, wherein at least one zone is a detection zone capable of being separated from said plurality of zones and the remainder of the device; wherein the detection zone comprises an immobilized binding partner for an analyte a bacteria and wherein binding between the immobilized binding partner and a suspected analyte bacteria

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causes formation of an optically detectable signal and detection of the signal indicates the presence of a suspected ~~analyte~~ bacteria in the sample;

separating at least part of the detection zone containing the bound ~~analyte~~ bacteria and immobilized binding partner from said plurality of zones and the remainder of the device; and

subjecting the separated detection zone to conditions effective to cause proliferation, replication or reproduction of the ~~analyte~~; and
~~wherein the analyte is a bacteria.~~

27. (Cancelled).

28. (Cancelled).

¹⁶
~~29.~~ (Previously Presented) The method of Claim 1, wherein the optically detectable signal is a light signal.

¹⁹
~~30.~~ (Previously Presented) The device of Claim ¹⁷~~10~~, wherein the optically detectable signal in the detection zone is a light signal.